Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE.

HENRY S. GRAVES, Forester.

April Field Program, 1914.

This program of field work and assignments in the Forest Service is issued quarterly on the 15th day of July, October, January, and April, and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

HENRY S. GRAVES, Forester.

ALBERT F. POTTER, Associate Forester.

HERBERT A. SMITH, editor; Bristow Adams, in charge of information.

FINDLEY BURNS, in charge of technical review.

Educational cooperation, Don Carlos Ellis.

Proofs and forms, CLAUDE M. BALLARD.

GEORGE B. SUDWORTH, dendrologist.

EUGENE S. BRUCE, expert lumberman.

ACCOUNTS.

M. E. FAGAN, chief; E. A. MELZAR, assistant chief.

38827—14——1

OPERATION.

JAMES B. ADAMS, assistant forester, in charge; D. D. BRONSON, forest inspector; ALLEN S. PECK, forest inspector; GEORGE G. ANDERSON, administrative assistant.

GEOGRAPHY .-- C. A. Kolb, chief.

ATLAS.-G. B. BRUCE.

DRAFTING .- J. M. WITHEROW.

PHOTOGRAPHY.—E. S. SHIPP.

ALIENATION.—J. B. SATTERLEE, J. E. BURCH.

MAINTENANCE.—GEORGE A. BENTLEY, chief.

SUPPLIES.—S. L. McLAURIN, property clerk.

SILVICULTURE.

W. B. GREELEY, assistant forester, in charge; EARLE H. CLAPP, forest inspector; R. Y. STUART, forest inspector; Austin Cary, logging engineer; Barrington Moore, forest plans; Harry Irion, office assistant. Franklin H. Smith, statistician in forest products, special detail, 501 Federal Building, Chicago, Ill.

STATE COOPERATION .- J. G. PETERS, chief.

Inspection.—L. S. Murphy.

Compilation of State forest laws.—Miss J. S. Peyton.

Study of forest conditions in North Carolina in cooperation with State Geological and Economic Survey.—J. S. Holmes, Chapel Hill.

FOREST INVESTIGATIONS.—RAPHAEL ZON, chief; S. T. DANA, as

Studies.—E. H. Frothingham, W. D. Sterrett, C. R. Tillotson, G. N. Lamb, W. R. Mattoon, G. E. Clement, C. H. Shinn.

FOREST DISTRIBUTION .- W. H. LAMB, in charge; Miss G. E. Wharton

COMPUTING .- W. B. BARROWS.

LIBRARY.—Miss H. E. STOCKBRIDGE.

COMPILATION.—GEO. DE S. CANAVARRO; Miss E. B. Leech.

Cloquet Experiment Station in cooperation with the University of Minnesota.—W. H. Kenety, Cloquet, Minn.

GRAZING.

A. F. POTTER, associate forester, in charge; L. F. KNEIPP, assistant forester; WILL C. BARNES, inspector of grazing.

GRAZING STUDIES (in cooperation with F. V. Coville, botanist, Bureau of Plant Industry).—James T. Jardine, inspector of grazing, in charge, Washington, D. C.

Forage investigations.—William A. Dayton, plant ecologist, Washington, D. C.

William R. Chapline, grazing assistant, Washington, D. C.

LANDS.

JAMES B. ADAMS, assistant forester, in charge; W. J. MANGAN, examiner.

LAND CLASSIFICATION, E. A. SHERMAN, in charge.

SETTLEMENT .- F. L. HARVEY, in charge.

ENTRY SURVEYS .- ROBERT V. R. REYNOLDS, in charge.

Boundaries.—H. E. Woolley, in charge.

WATER POWER.—O. C. MERRILL, chief engineer; T. W. Norcross, assistant chief engineer; R. R. RANDELL, junior engineer.

CLAIMS AND OCCUPANCY .- CHARLES H. SQUIRE, in charge.

PRODUCTS.

W. B. GREELEY, assistant forester, in charge.

FOREST PRODUCTS LABORATORY (in cooperation with the University of Wisconsin, Madison, Wis.).—Howard F. Weiss, director.

H. S. BETTS and CARLILE P. WINSLOW, administrative assistants.

ADVISORY BOARD.—Dr. W. K. Hatt, mechanical and civil engineer, Purdue University; Prof. Charles F. Burgess, chemical engineer, and Dr. L. R. Ingersoll, professor of physics, University of Wisconsin; Prof. I. W. Bailey, forestry school, Harvard University.

Design of laboratory equipment.—ROLF THELEN.

Review of results.—FRANK J. HALLAUER.

DERIVED PRODUCTS.—ERNEST BATEMAN, acting in charge; A. W. Schorger, F. W. Kressman, R. C. Palmer, Homer Cloukey, Lester E. Cover.

Engineering.—A. L. Heim, in charge; James O. Bixby, O. M. Sutherland, Harry N. Knowlton.

MAINTENANCE.—CHAS. P. JUCKEM, in charge.

Pulp and Paper.—O. L. E. Weber, in charge; H. E. Surface, Sidney D. Wells, G. C. McNaughton, Charles S. Gwinn, Sidney E. Lunak, Clinton K. Texter.

TIMBER PHYSICS.—H. D. TIEMANN, in charge; Eloise Gerry, N. de

W. Betts, M. E. Diemer, James E. Imrie, A. Koehler.

TIMBER TESTS.—JOHN A. NEWLIN, in charge; A. K. Armstrong, Thomas R. C. Wilson, Lorraine J. Markwardt.

WOOD PRESERVATION .- CLYDE H. TEESDALE, in charge; Geo. E. Hunt,

James D. MacLean, Robt. E. Prince, E. C. Sparver.

PATHOLOGY (in cooperation with the Bureau of Plant Industry).—

C. J. HUMPHREY, in charge; Ruth E. Fleming.

INDUSTRIAL INVESTIGATIONS .- O. T. SWAN, in charge, Washington, D. C. Wood Industry Statistics, Jesse C. Nellis, Clark W. Gould, and W. D. Brush, Washington, D. C. Waste Utilization, R. K. Helphenstine, jr., Washington, D. C. Production of Lumber and Forest Products (in cooperation with the Bureau of Statistics, the Bureau of the Census, and lumber manufacturers' associations), A. H. Pierson, Washington, D. C. Blighted Chestnut Utilization Studies, Jesse C. Nellis, Washington, D. C. Veneer Investigations, S. L. Wolfe, Washington, D. C. Slack-cooperage Investigations, O. T. Swan, Washington, D. C. Tight-cooperage Investigations (Dist. 7), John T. Harris, Washington, D. C. Departmental Cooperation, Inspection, and Revision of Government Specifications, R. E. Simmons, Washington, D. C. Box Industry Investigations, Jesse C. Nellis, Washington, D. C. Furniture Industry Investigations (Chicago office, Silviculture), Franklin H. Smith, Chicago, Ill. Reports on Foreign Hardwoods, C. D. Mell and W. D. Brush, Washington, D. C. Collaborators, Hu Maxwell, Chicago Ill.; A. B. Strough, Albany, N. Y.; and Hugh P. Baker, Syracuse, N. Y.

ACQUISITION OF LANDS UNDER THE WEEKS LAW

WM. L. HALL, assistant forester, in charge, Washington, D. C. Lumberman's Examinations.—C. D. Cushing, E. D. Fletcher, and George E. Marshall, Washington, D. C.

Examinations of Lands.—W. W. Ashe, forest inspector, in charge Washington, D. C. White Mountain Area, J. S. Benedict, in charge Gorham, N. H., D. W. Martin, forest examiner, R. J. Noyes, H. S. Davis Karl Schmitt, Louis H. Steffens, forest assistants; Massanutten, Potomac, and Youghiogheny Areas, E. D. Clark, forest examiner in charge Woodstock, Va.; Shenandoah Area, S. H. Marsh, forest examiner, in charge, Harrisonburg, Va.; Natural Bridge Area, J. H. Fahrenback forest examiner, in charge, Natural Bridge, Va., E. L. Lindsey, J. S. Kaplan, and W. E. Barbour, forest assistants; Monongahela Area, W. A. Hopson, forest examiner, in charge, Elkins, W. Va.; White Top Area R. P. Holdsworth, forest assistant, in charge, Abingdon, Va.; Unak

Area, E. P. Bushnell, forest examiner, in charge, Johnson City, Tenn., J. H. Keyes, forest assistant; Mount Mitchell Area, L. L. Bishop, forest examiner, in charge, Marion, N. C., E. M. Bruner, forest assistant; Nantahala Area, R. F. Hemingway, forest examiner, in charge, Andrews, N. C.; Smoky Mountain Area, V. Rhoades, forest examiner, in charge, Townsend, Tenn., and W. J. Damtoft, forest assistant; Pisgah Area, J. J. Fritz, forest examiner, in charge, Highlands, N. C.; Savannah Area, R. W. Shields, forest examiner, in charge, Clayton, Ga., H. G. Spahr, forest assistant; Georgia Area, E. V. Clark, forest examiner, in charge, Blue Ridge, Ga., R. C. Hall, forest examiner; Cherokee Area, H. L. Johnson, forest examiner, in charge, Etowah, Tenn., H. L. Russell and S. H. Thompson, forest examiners, and H. M. Sears, forest assistant; Alabama Area, C. E. Beaumont, forest examiner, Haleyville, Ala.

SURVEY OF LANDS .- RUDOLPH DIEFFENBACH, forest examiner, in charge; Robert G. Merritt, forest examiner; White Mountain Area, Arthur E. Hoxie, Frederick A. Gardner, and Leon C. Marshall, examiners of surveys; Vincent L. Ahern and Leonard J. Long, transitmen, Gorham, N. H.; Potomac Area, A. M. Ockerblad, Alfred P. Hamilton, and E. P. Whitten, examiners of surveys, and Rodney D. Brown, transitman, Woodstock, Va.; Massanutten Area, E. F. Benedum and Edward R. Conrad, examiners of surveys, and Archibald D. Duffie, transitman, Woodstock, Va.; Mount Mitchell Area, Dave M. Gibson, examiner of surveys, Marion, N. C.; Nantahala Area, James Denman, examiner of surveys, and Max McCullough, transitman, Andrews, N. C.; Georgia Area, Thomas A. Cox, jr., and E. L. Merrill, examiners of surveys, and Francis C. Hall, transitman, Blue Ridge, Ga.; Unaka Area, Robert E. Witt, examiner of surveys, and James Gore, jr., transitman, Johnson City, Tenn.; Savannah Area, William N. Sloan, Roy L. McGuire, and Harold G. Wood, examiners of surveys, and John W. Fox, transitman, Highlands, N. C.; Monongahela Area, Marvin L. Taylor, examiner of surveys, Elkins, W. Va.; Shenandoah Area, C. F. Muzzey, examiner of surveys, Harrisonburg, Va.; Natural Bridge Area, Beverly M. Higginbotham, examiner of surveys, Natural Bridge, Va.

ADMINISTRATION OF ACQUIRED LANDS.—K. W. WOODWARD, forest inspector, in charge, Washington, D. C.

LAW.—A. H. McConville, assistant to solicitor, in charge, Washington, D. C. A. S. Lanier, assistant to solicitor, Richmond, Va.; Record examiners, George E. Taylor, Clarence E. Miles, and James II. Swan, Bristol, Tenn.; Alfred S. Grigg, Johnson City, Tenn.; Julius Fletcher, Franklin, N. C.; Collin H. Harding, Marion, N. C.; Charles E. Jones, Walhalla, S. C.; Cameron F. McRae, Clayton, Ga.; John M. Burns, Blue Ridge, Ga.; M. B. Stickley, Staunton, Va.; W. L. Newman and M. E. Stickley, Woodstock, Va.; Frederick Goshorn, Moorefield, W. Va.

DISTRICT 1.

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, and southwestern North Dakota. Office, Federal Building, Missoula, Mont.

F. A. SILCOX, district forester; E. W. KRAMER, district engineer.

LAW.—Office of the Solicitor (Forest Service branch). D. F. Mc-GOWAN, assistant to the solicitor, in charge.

ACCOUNTS .- JOHN A. URBANOWICZ, district fiscal agent.

OPERATION.—J. F. PRESTON, assistant district forester; R. B. ADAMS, superintendent of telephone construction.

MAINTENANCE.—GARDNER I. PORTER.

SILVICULTURE.—D. T. MASON, assistant district forester; Dorr Skeels and H. F. Ellard, logging engineers.

TIMBER SALES .-- A. B. HASTINGS.

PLANTING .-- H. H. FARQUHAR.

S. S. J. MALVEN, insect control.

JAMES R. WEIR, consulting pathologist, Missoula, Mont.

GRAZING.—C. H. Adams, assistant district forester.

STUDIES.—CHAS. E. FLEMING, grazing examiner.

LANDS.—R. H. RUTLEDGE, assistant district forester; John D. Jones, assistant.

CLAIMS .- P. J. O'BRIEN.

SETTLEMENT.-J. W. STREIT.

LAND CLASSIFICATION.—C. B. SWIM, assistant.

PRODUCTS .- P. R. HICKS.

EXPERIMENT STATION.

Priest River, Kaniksu National Forest.—Donald R. Brewster, in charge, Priest River, Idaho.

NATIONAL FORESTS.

IDAHO.

Clearwater.—Charles A. Fisher, forest supervisor, Orofino (WU-Am).

Coeur d'Alene.—MEYER H. WOLFF, forest supervisor, Coeur d'Alene (WU-Am); Fred R. Mason and W. W. Morris, deputy forest supervisors; and F. I. Rockwell, forest examiner.

Kaniksu.—See Washington.

Nezperce.—George V. Ring, forest supervisor, Grangeville (WU-Am); J. Arthur Brown, deputy forest supervisor.

Pend Oreille.—J. A. FITZWATER, forest supervisor, Sandpoint (WU-Am, N, W); R. Trevor Ferguson, deputy forest supervisor.

- Selway.—Frank A. Fenn, forest supervisor, Kooskia (WU-N); Charles F. Howell, deputy forest supervisor.
- St. Joe.—Edward A. Holcomb, forest supervisor, St. Maries (Continental-WF); Wilford B. Willey, deputy forest supervisor; Richard C. Eggleston, forest examiner.

MONTANA.

- Absaroka.—Joseph D. Warner, forest supervisor, Livingston (WU-Am, N).
- Beartooth.—GLEN A. SMITH, forest supervisor, Billings (WU-Am, N); J. C. Whitham, deputy forest supervisor.
- Beaverhead.—C. K. WYMAN, forest supervisor, Dillon (WU-Am); John E. David, deputy forest supervisor.
- Bitterroot.—W. W. WHITE, forest supervisor, Missoula (WU-Am, N); Herbert F. Lindsay, forest assistant.
- Blackfeet.—R. P. McLaughlin, forest supervisor, Kalispell (WU-Am, GN); Charles E. Baker, forest assistant.
- Cabinet.—CLAUDE W. GRIFFIN, forest supervisor, Thompson Falls (WU-Am. N); Carl M. Stevens, forest assistant.
- Custer.—George E. Martin, forest supervisor, Miles City (WU-Am, N).
- Deerlodge.—Lewis C. Stockdale, forest supervisor, Anaconda (P-Am, N); C. N. Whitney, C. R. Clark, and J. C. Whitham, forest examiners.
- Flathead.—Donald Bruce, forest supervisor, Kalispell (WU-Am, GN); John H. Clack, deputy forest supervisor.
- Gallatin.—D. T. CONKLING, forest supervisor, Bozeman (WU-Am, N); Arthur H. Abbott, deputy forest supervisor; Howard E. West, forest assistant.
- Helena.—J. B. Seely, forest supervisor, Helena (WU-Am, N).
- Jefferson.—Scott Leavitt, forest supervisor, Great Falls (WU-Am, N); Wellman Holbrook, deputy forest supervisor; Adrian C. Adams, forest assistant.
- Kootenai.—WILLIAM A. RAYMOND, acting forest supervisor, Libby (WU-Am, GN); William C. Latane and Justin K. Dwinelle, deputy forest supervisors; Webster H. Ransom and John C. Ketridge, forest examiners.
- Lewis and Clark.—Thomas C. Spaulding, forest supervisor, Chouteau (WU-Am, GN).
- Lolo.—Elers Koch, forest supervisor, Missoula (WU, P-Am, N); John E. Keach, forest examiner; William W. Bennett, forest assistant.
- Madison.—Roscoe G. Willson, acting forest supervisor, Sheridan (WU-Am, N); Ralph E. Bodley and E. F. Jones, forest assistants.
 - Missoula.—Rutledge Parker, forest supervisor, Missoula (WU, P-Am, N); Fay G. Clark, forest assistant.
 - Sioux .- See South Dakota.

NORTH DAKOTA.

Dakota.—C. A. Ballinger, forest supervisor, Camp Crook, S. Dak. (WU via Bellefourche-Am via Bellefourche).

SOUTH DAKOTA.

Sioux.—C. A. Ballinger, forest supervisor, Camp Crook (WU via Bellefourche—Am via Bellefourche).

WASHINGTON.

Kaniksu.—M. N. STICKNEY, forest supervisor, Newport (WU-Am, GN); J. F. Forsythe, deputy forest supervisor.

DISTRICT 2.

Colorado, Wyoming, South Dakota, Nebraska, western Kansas, northern Michigan, and northern Minnesota. Office, Majestic Building, Denver, Colo.

SMITH RILEY, district forester; LYLE A. WHITSIT, hydroelectrical engineer.

LAW.—Office of the Solicitor (Forest Service branch). George E. Trowbridge, assistant to the solicitor, in charge.

ACCOUNTS.—H. I. LOVING, district fiscal agent.

OPERATION.—FRED W. MORRELL, assistant district forester.

MAINTENANCE.-F. H. CARROLL.

SILVICULTURE.—C. M. Granger, assistant district forester; J. H. Potts, forest examiner.

PLANTING.—SEWARD D. SMITH.

FOREST INVESTIGATIONS.—C. G. BATES.

CARL HARTLEY, consulting pathologist, Washington, D. C.

GRAZING.—J. W. Nelson, assistant district forester.

STUDIES.—LYNN H. DOUGLAS, grazing examiner.

LANDS.—C. J. STAHL, assistant district forester; Thos. M. Moorman, assistant.

EXPERIMENT STATIONS.

Fremont, Pike National Forest.—F. B. NOTESTEIN, Manitou, Colo.

Wagon Wheel Gap, Rio Grande National Forest.—Peter Keplinger and
Howard R. Flint, Wagon Wheel Gap, Colo., and Thomas A. Blair,
of the Weather Bureau.

NATIONAL FORESTS.

COLORADO.

Arapaho.—ALVA A. SIMPSON, forest supervisor, Fraser (WU-Ad); Arthur T. Upson, forest examiner.

Battlement.—John W. Lowell, jr., forest supervisor, Colbran (WU-WF, G); George Z. Mason, forest examiner.

Cochetopa.—Eugene Williams, forest supervisor, Saguache (WU-G); Charles P. Bliss, forest examiner.

Colorado.—H. N. WHEELER, forest supervisor, Fort Collins (WU-WF).

Durango.—Ernest W. Shaw, forest supervisor, Durango (WU-G); R. S. Wheeler, forest examiner.

Gunnison.—William R. Kreutzer, forest supervisor, Gunnison (WU-WF, G); Harold L. Borden, forest assistant.

Hayden.—See Wyoming.

Holy Cross.—HARRY H. FRENCH, forest supervisor, Glenwood Springs (WU-WF, G); George R. Morrison, forest examiner.

La Sal.—See Utah, District 4.

Leadville.—R. E. CLARK, forest supervisor, Leadville (WU, P-WF, G);

J. E. Martin, forest examiner.

Montezuma.—Ress Phillips, forest supervisor, Mancos (WU-G); Gordon Parker, forest examiner.

Pike.—Theo. Shoemaker, forest supervisor, Denver (WU, P-Ad, Am, G, US, WF); W. I. Hutchinson, forest examiner; V. A. Beede, Everard S. Keithley, forest assistants; Monument Nursery, W. H. Schrader, forest planting assistant, Monument.

Rio Grande.—A. L. Sweitzer, forest supervisor, Monte Vista (WU-G); Walter F. Bowers, deputy forest supervisor; Jay Higgins, forest

examiner.

Routt.—J. H. RATLIFF, forest supervisor, Steamboat Springs (WU-Ad); Ray Peck, deputy forest supervisor.

San Isabel.—J. N. LANGWORTHY, forest supervisor, Westcliffe (WU-G); Albin G. Hamel, forest examiner.

San Juan.—H. EARL FRENCH, forest supervisor, Pagosa Springs (WU-G); A. F. C. Hoffman, forest examiner.

Sopris.—John McLaren, forest supervisor, Aspen (WU-WF, G); W. G. Baxter, forest examiner.

Uncompangre.—Howard S. Bushnell, forest supervisor, Delta (WU-

G); J. H. Ramskill, forest examiner.

White River.—James A. Blair, forest supervisor, Meeker (WU-WF, G); Crosby A. Hoar, forest examiner.

KANSAS.

Kansas.—B. R. H. D'ALLEMAND, forest supervisor, Garden City (WU, P-WF); Garden City Nursey.

MICHIGAN.

Marquette. - W. B. Piper, forest supervisor, East Tawas (WU-Am). Michigan.

MINNESOTA.

Minnesota.—G. E. MARSHALL, forest supervisor, Cass Lake (WU-Am, GN); Howard H. Richmond, forest assistant.

Superior.—Leslie Brownell, forest supervisor, Ely (WU-GN); Victor C. Follenius, forest assistant.

NEBRASKA.

Nebraska.—Fred R. Johnson, forest examiner, Halsey (WU-Ad); Halsey Nursery, Theodore Krueger, forest assistant.

SOUTH DAKOTA.

- Black Hills.—Paul D. Kelleter, forest supervisor, Deadwood (WU-Ad, Am); William Wiehe, deputy forest supervisor; Percy T. Smith, Huber C. Hilton, forest examiners; M. J. Sweeney, Roscoe B. Weaver, forest assistants.
- Harney.—R. P. IMES, forest supervisor, Custer (WU-Ad); Richard A. Phillips, forest assistant.

WYOMING.

- Bighorn.—E. N. KAVANAGH, forest supervisor, Sheridan (WU-Ad); Andrew G. Stockwell, deputy forest supervisor; Earl S. Peirce, forest examiner.
- Bonneville.—L. E. COOPER, forest supervisor, Dubois (WU-Am); Myron W. Thompson, forest examiner; Clarence E. Taylor and Richard T. Guthrie, forest assistants.
- Bridger.—H. C. Hall, forest supervisor, Pinedale (WU-Am).
- Hayden.—James Blackhall, forest supervisor, Encampment (WU, P-Am); P. J. Paxton, forest examiner.
- Medicine Bow.—Geo. A. Duthie, forest supervisor, Laramie (WU, P-Am); D. S. Jeffers, deputy forest supervisor.
- Shoshone.—R. W. ALLEN, forest supervisor, Cody (WU-Ad); Fred B. Agee, deputy forest supervisor.
- Sundance.—Paul D. Kelleter, forest supervisor, Deadwood, S. Dak. (WU-Ad, Am).
- Washakie.—C. G. POOLE, forest supervisor, Lander (WU-Am).

DISTRICT 3.

Arizona, New Mexico, and Oklahoma. Office, Luna-Otero Building, Albuquerque, N. Mex.

A. C. RINGLAND, district forester; LYLE A. WHITSIT, hydroelectrical engineer.

LAW.—Office of the Solicitor (Forest Service branch). J. O. SETH, assistant to the solicitor, in charge.

ACCOUNTS.—ALBERT MORRIS, district fiscal agent.

OPERATION.—A. O. WAHA, assistant district forester; PAUL P. PITCHLYNN, geography; HOWARD B. WAHA, road construction.

MAINTENANCE.-H. B. HAMMOND.

SILVICULTURE.—T. S. WOOLSEY, Jr., assistant district forester; JOSEPH C. KIRCHER, forest examiner; ATHOL A. WYNNE, lumberman, and QUINCY RANDLES, forest examiner, timber sale inspection, and check-scaling.

GRAZING.—JOHN KERR, assistant district forester.

STUDIES.—R. R. HILL, grazing examiner; ARTHUR D. READ, forest examiner.

LANDS.—Frank C. W. Pooler, assistant district forester; M. M. Cheney, national forest examiner. Classification: Frederic Winn, national forest examiner; Frank E. Andrews, forest supervisor; Rex King, forest examiner. Entry surveys: W. H. Finigan, surveyor, Carson; W. G. Turley, surveyor, Coconino; R. P. A. Johnson, surveyor, Carson.

EXPERIMENT STATION.

Fort Valley, Coconino National Forest.—G. A. Pearson, Flagstaff, Ariz.; Clarence F. Korstian, forest assistant.

NATIONAL FORESTS.

ARIZONA.

Apache.—John D. Guthrie, forest supervisor, Springerville (WU, P-WF); Clifford W. McKibbin, forest examiner; W. L. Schofield, forest assistant.

Chiricahua.—A. H. ZACHAU, forest supervisor, Portal, via Rodeo, N. Mex.

(WU-WF).

Coconino.—Willard M. Drake, forest supervisor, Flagstaff (WU, P-WF); Thomas E. McCullough, Gordon T. Backus, and H. D. Burrall, forest examiners; Murrell W. Talbot, forest assistant.

Coronado.—ROBERT J. SELKIRK, forest supervisor, Tucson (WU-WF).

Crook.—T. T. SWIFT, forest supervisor, Safford (WU-WF).

Prescott.—C. H. HINDERER, forest supervisor, Prescott (WU-WF); J. C. McNelty, deputy forest supervisor; Edward P. Ancona, forest assistant.

Sitgreaves.—Charles H. Jennings, forest supervisor, Snowflake (WU, P-WF).

Tonto.—C. C. HALL, forest supervisor, Roosevelt (WU-WF); Reginald

B. Forbes, forest assistant.

Tusayan.—Harold Greene, forest supervisor, Williams (WU, P-WF); Robert L. Deering, deputy forest supervisor; George W. Kimball, forest assistant.

Zuni.—See New Mexico.

NEW MEXICO.

Alamo.-R. F. BALTHIS, forest supervisor, Cloudcroft (WU-WF).

Carson.—RAYMOND E. MARSH, acting forest supervisor, Tres Piedras (WU-G). Aldo Leopold, forest supervisor (on leave); Chas. H. Kissam, deputy forest supervisor; Earl W. Loveridge, forest assistant.

Chiricahua.—See Arizona.

Datil.—W. H. GODDARD, forest supervisor, Magdalena (WU, P-WF); H. Basil Wales, forest examiner; Ward Shepard, forest assistant.

Gila.—Hugh G. Calkins, supervisor, Silver City (WU, P-WF); Ausburn H. Douglas, deputy forest supervisor; N. Curtis Case, forest examiner; Fort Bayard Nursery, H. C. Turner, forest planting assistant; Marinus Westveld, forest assistant. Extensive reconnaissance; Otto F. Swenson, forest examiner, in charge; Ernest Wohlenburg, forest assistant.

Jemez.—Don P. Johnston, forest supervisor, Santa Fe (WU, P-G);

Wilbur J. O. Byrne, forest assistant.

Lincoln.—J. A. Kinney, forest supervisor, Capitan (WU-WF).

Manzano.—James F. Mullen, forest supervisor, Albuquerque (WU, P-WF).

Pecos.—Don P. Johnston, forest supervisor, Santa Fe (WU, P-WF); Ira T. Yarnall, forest assistant; Las Gallinas Nursery, Herman Krauch, examiner; Thomas P. Reid, forest assistant.

Zuni.-JAMES F. MULLEN, forest supervisor, Albuquerque (WU, P-WF).

OKLAHOMA.

Wichita.—Frank Rush, game warden, in charge, Cache (WU-WF).

DISTRICT 4.

Utah, southern Idaho, western Wyoming, eastern and central Nevada, and northwestern Arizona. Forest Service Building, Ogden, Utah.

E. A. SHERMAN, district forester; J. P. MARTIN, district engineer. LAW.—Office of the Solicitor (Forest Service branch). J. F. LAWSON, assistant to the solicitor, in charge.

ACCOUNTS .-- Q. R. CRAFT, district fiscal agent.

OPERATION .- A. C. McCain, assistant district forester.

MAINTENANCE.—FELIX T. MOORE.

SILVICULTURE.—O. M. Butler, assistant district forester; D. F. Seery, logging engineer; D. M. Lang, S. C. Scribner, scalers.

PLANTING .- J. M. FETHEROLF.

COMPILATION RECONNAISSANCE DATA: Wyoming National Forest.—R. A. STRETCH, forest supervisor.

GRAZING .- HOMER E. FENN, assistant district forester.

STUDIES .- ALFRED E. ALDOUS, grazing examiner.

LANDS.—T. C. HOYT, assistant district forester; R. E. GERY, assistant; B. L. Wheeler, mineral examiner; C. G. Smith, in charge of land classification.

SUPPLY DEPOT .-- A. M. SMITH, property clerk.

PROPERTY AUDIT .- J. G. FALCK, property auditor.

EXPERIMENT STATION.

Utah, Manti National Forest.—ARTHUR W. SAMPSON, in charge; E. R. Hodson, Ephraim, Utah.

NATIONAL FORESTS.

ARIZONA.

Dixie.—See Utah.

Kaibab.—James L. Pelton, forest supervisor, Kanab, Utah (WU-WF).

IDAHO.

- Boise.—E. GRANDJEAN, forest supervisor, Boise (WU-Am); M. S. Benedict, deputy forest supervisor; Dana Parkinson, forest examiner. Cache.—See Utah.
- Caribou.—G. G. Bentz, forest supervisor, Montpelier (WU-Am); L. W. Hastings, deputy forest supervisor; J. H. Hull, forest assistant.

Challis .- DAVID LAING, forest supervisor, Challis (WU-Am).

Idaho.—Herbert Graff, forest supervisor, McCall (WU-P).

- Lemhi.—C. I. Huddle, forest supervisor, Mackay; E. C. Sanford, forest assistant (WU-Am).
- Minidoka.—, forest supervisor, Oakley; C. D. Simpson, forest assistant (WU-Am).
- Palisade.—Frank J. Ryder, forest supervisor, St. Anthony (WU-Am); C. F. Evans, forest assistant.
- Payette.—Guy B. Mains, forest supervisor, Emmett (WU-Am); Lawrence J. Phelan, deputy forest supervisor; W. N. Sparhawk, forest examiner; W. A. Smith and Lee O. Miles, forest assistants.
- Pocatello.—CLINTON G. SMITH, forest supervisor, Logan, Utah; Pocatello Nursery, Arthur P. Say, forest ranger, Pocatello.
- Salmon.—John A. Pearson, forest supervisor, Salmon (WU-Am); S. S. Stewart, deputy forest supervisor; Herman Work, forest examiner.
- Sawtooth.—C. N. Woods, forest supervisor, Hailey (WU-Am); Herbert G. McPheters and Samuel B. Locke, deputy forest supervisors.
- Targhee.—CHESTER B. Morse, forest supervisor, St. Anthony (WU-Am); Charles A. Beam, deputy forest supervisor; J. W. Stokes, forest examiner.
- Weiser.—J. B. LAFFERTY, forest supervisor, Weiser (WU-Am); W. M. Campbell, deputy forest supervisor; A. E. Oman, forest examiner.

NEVADA.

Humboldt.—S. B. Arthur, forest supervisor, Gold Creek (WU-WF).

Moapa.—Thomas J. Collins, forest supervisor, Austin (WU-Am).

Nevada.—Geo. C. Thompson, forest supervisor, Ely (WU-WF).

Ruby.—James M. Ryan, forest supervisor, Elko (WU-WF).

Santa Rosa.—W. W. Blakeslee, forest supervisor, Paradise.

Toiyabe.—Thomas J. Collins, forest supervisor, Austin (WU, P-WF);

R. D. Garver, forest assistant.

UTAH.

Ashley.—W. M. Anderson, forest supervisor, Vernal (WU-WF).

Cache.—Clinton G. Smith, forest supervisor, Logan (WU-Am); E. C.

Shepard, forest examiner.

Dixie.—John Raphael, forest supervisor, St. George (WU-WF).

Fillmore.—Ernest Winkler, forest supervisor, Richfield (WU-WF); Lester E. Hitchcock, forest examiner.

Fishlake.—Carl B. Arentson, forest supervisor, Salina (WU-WF); D. A. Arrivee, forest assistant.

La Sal.—J. W. HUMPHREY, forest supervisor, Moab (WU-WF).

Manti.—A. W. Jensen, forest supervisor, Ephraim (WU-WF); B. E. Mattsson, deputy forest supervisor; J. C. Roak and E. S. Baker, forest assistants.

Minidoka.-See Idaho.

Pocatello.-See Idaho.

Powell.—Geo. H. Barney, forest supervisor, Escalante (WU-WF).

Sevier .- O. C. Snow, forest supervisor, Panguitch (WU-WF).

Uinta.—W. I. PACK, forest supervisor, Provo (WU-WF); J. Carl Allred, deputy forest supervisor.

Wasatch.—J. F. Bruins, forest supervisor; Lee A. Harris, deputy forest supervisor, Salt Lake City (WU, P-Am, WF); S. E. Bower, forest assistant; Cottonwood Nursery, N. J. Fetherolf, forest planting assistant; Beaver Creek Nursery, Asa L. Brower, forest examiner in charge, Kamas.

WYOMING.

Ashley.—See Utah.

Caribou.—See Idaho.

Palisade.—See Idaho.

Targhee.—See Idaho.

Teton.—R. E. MILLER, forest supervisor, Jackson (WU-Am); H. P. Maris, forest examiner.

Wyoming.—James E. Jewell, forest supervisor, Afton (WU-Am); John E. Ingram, deputy forest supervisor.

DISTRICT 5.

California and southwestern Nevada. Office, First National Bank Building, San Francisco, Cal.

COERT DUBOIS, district forester; F. H. FOWLER, district engineer; J. L. Mathias, assistant to district engineer; W. C. Hodge, jr., in charge information; Clarence Wiley, inspector of records.

LAW.—Office of the Solicitor (Forest Service branch). H. P. DECHANT, assistant to the solicitor, in charge; MAURY CURTIS, assistant to the solicitor.

ACCOUNTS.—A. W. SMITH, district fiscal agent.

OPERATION.—ROY HEADLEY, assistant district forester; D. P. GODWIN, forest supervisor, assigned to fire protection; FREDERICK H. HAFLEY, telephone expert.

MAINTENANCE.—T. M. KENNEDY.

SILVICULTURE.—T. D. WOODBURY, assistant district forester; SWIFT BERRY, forest examiner; J. C. Elliott, lumberman; H. N. ORMSBEE, logging engineer.

Louis Margolin, forest examiner, reconnaissance.

Forest Investigations.—L. T. Larsen, forest examiner.

RALPH HOPPING, national forest examiner, insect control.

E. P. MEINECKE, consulting pathologist; J. S. BOYCE, scientific assistant, San Francisco, Cal.

GRAZING.—JOHN H. HATTON, assistant district forester.

LANDS.—L. A. BARRETT, assistant district forester; Chas. S. BROTHERS, assistant; W. H. FRIEDHOFF, mineral examiner. Land classification: S. N. STONER, national forest examiner, in charge of district; J. O. Morrow, deputy forest supervisor, in charge of field party. Entry surveys: P. L. Day, national forest examiner, surveyor.

PRODUCTS.—C. STOWELL SMITH, assistant district forester, in charge; C. A. KUPFER, forest examiner.

EXPERIMENT STATIONS.

Feather River, Plumas National Forest.—J. A. MITCHELL, forest examiner in charge, Quincy, Cal.

Converse, Angeles National Forest.—EDWARD N. MUNNS, forest assistant, in charge, Seven Oaks, Redlands, Cal.

NATIONAL FORESTS.

CALIFORNIA.

Angeles.—R. H. CHARLTON, forest supervisor, Los Angeles (WU, P-WF). California.—M. A. Benedict, forest supervisor, Willows (P-WF); B. H. Mace, deputy forest supervisor; S. W. Strothman, forest examiner.

Cleveland.—S. W. WYNNE, forest supervisor, San Diego (WU, P-WF).

- Eldorado.—Evan W. Kelley, forest supervisor, Placerville (WU-WF); George W. Lyons, forest examiner.
- Inyo.-A. H. HOGUE, forest supervisor, Bishop (WU-WF).
- Kern.—F. P. Cunningham, acting forest supervisor, Hot Springs (WU via Ducor-WF).
- Klamath.—W. B. Rider, forest supervisor, Yreka (WU-WF); J. R. Hall, deputy forest supervisor; Douglas K. Noyes, forest examiner.
- Lassen.—W. J. Rushing, forest supervisor, Red Bluff (P-WF); Shirley W. Allen, deputy forest supervisor; R. H. Boerker, forest examiner.
- Modoc.—C. E. RACHFORD, forest supervisor; Alturas (P-WF); Vernon L. Bonner, deputy forest supervisor; Belknap C. Goldsmith, forest examiner.
- Mono. See Nevada.
- Monterey.—N. H. SLOANE, forest supervisor, Arbolado (WU, Monterey-WF, Monterey).
- Plumas.—D. N. Rogers, forest supervisor, Quincy (WU, Keddie, Cal.—G); W. G. Durbin, deputy forest supervisor; George R. Orr and Reese W. Taylor, forest examiners.
- Santa Barbara.—W. M. SLOSSON, forest supervisor, Santa Barbara (P-WF); H. G. Merrill, deputy forest supervisor; W. M. Moore, forest examiner.
- Sequoia.—ALLAN B. PATTERSON, forest supervisor, Hot Springs (WU via Ducor-WF).
- Shasta.—R. F. Hammatt, forest supervisor, Sisson (P-WF); M. R. Tillotson, deputy forest supervisor; Stewart B. Show and Edward I. Kotok, forest examiners; Pilgrim Creek Nursery, Fred W. Graham, assistant forest ranger, in charge, McCloud.
- Sierra.—P. G. Redington, forest supervisor, Northfork (WU via Friant-WF, Friant); Ernest G. Dudley and Cary Hill, forest examiners; Dwight C. Birch, forest assistant.
- Stanislaus.—R. W. Ayres, forest supervisor, Sonora (WU-WF); T. C. West, deputy forest supervisor; J. V. Wulff, forest examiner.
- Tahoe.—R. L. P. BIGELOW, forest supervisor, Nevada City (WU-WF); W. H. Gallaher and K. Mills, forest examiners.
- Trinity.—W. A. Huestis, forest supervisor, Weaverville (WU-WF); J. D. Coffman, deputy forest supervisor; Ernst V. Jotter and O. M. Evans, forest examiners.

NEVADA.

Eldorado. - See California.

Inyo.—See California.

Mono. WM. M. MAULE, forest supervisor, Gardnerville (WU-WF).

Tahoe.—See California.

DISTRICT 6.

Washington, Oregon, and Alaska. Office, Beck Building, Portland, Oreg.

GEO. H. CECIL, district forester; E. LEONARD LUNDGREN, district engineer.

LAW.—Office of the Solicitor (Forest Service branch). W. F. STALEY, assistant to the solicitor, in charge; EARL C. ARNOLD, assistant to the solicitor.

ACCOUNTS.—A. H. Cousins, district fiscal agent.

OPERATION .- C. H. FLORY, assistant district forester.

MAINTENANCE.—SHIRLEY BUCK.

3

SILVICULTURE.—F. E. AMES, assistant district forester; C. S. JUDD, assistant district forester; W. H. GIBBONS, investigation of logging costs; W. T. ANDREWS and C. H. WOODCOCK, logging engineers; EDWIN C. ERICKSON and L. A. NELSON, scalers.

PLANTING.—J. F. KÜMMEL and C. P. WILLIS, forest examiners.

FOREST INVESTIGATIONS .- T. T. MUNGER, forest examiner.

J. F. Pernot, forest examiner, insect control.

GRAZING.—T. P. MACKENZIE, assistant district forester.

LANDS.—C. J. Buck, assistant district forester; land classification, J. Roy Harvey, forest examiner.

PRODUCTS.—H. B. OAKLEAF, in charge; W. J. Paeth, Portland; C. W. Zimmerman, Cornelius Barry, Seattle, Wash.

EXPERIMENT STATION.

Wind River, Columbia National Forest.—Julius V. Hofmann, forest assistant, in charge, Carson, Wash.

NATIONAL FORESTS.

ALASKA.

Chugach.—W. G. Weigle, forest supervisor, Ketchikan (SC, U. S. A., WU-AP, Am); Thomas M. Hunt, deputy forest supervisor; Bruce Hoffman, forest examiner.

Tongass.—W. G. Weigle, forest supervisor, Ketchikan (SC, U. S. A., WU-AP, Am); Geo. L. Drake, forest examiner.

OREGON.

Cascade.—C. R. Seitz, forest supervisor, Eugene (WU, P-WF); B. F. Heintzleman, deputy forest supervisor.

Crater.—M. L. ERICKSON, forest supervisor, Medford (WU, P-WF); E. H. MacDaniels, deputy forest supervisor; H. D. Foster, William E. White, forest examiners. Deschutes .- MELVIN L. MERRITT, forest supervisor, Bend (WU, PT & T-GN); W. J. Sproat, forest assistant.

Fremont.—GILBERT D. BROWN, forest supervisor, Lakeview (WU via Reno, Nev-P, WF); R. A. Bradley, deputy forest supervisor; Norman G. Jacobson, forest examiner.

Klamath.—See California.

- Malheur.—Cy. J. BINGHAM, forest supervisor, John Day (WU via Baker-Am, WF via Baker); Carl B. Neal, forest assistant.
- Minam,—EPHRAIM BARNES, forest supervisor, Baker (WU-Am).
- Ochoco.—Homer Ross, forest supervisor, Prineville (WU, PT & T-Am); Allen Hodgson, deputy forest supervisor; F. S. Fuller, forest assistant.
- Oregon,-T. H. SHERRARD, forest supervisor, Portland (WU, P-Am, WF, N); Ralph S. Shelley, deputy forest supervisor; W. B. Osborne, forest examiner.
- Paulina.-Apportioned for administrative purposes to the Deschutes, the Fremont, and the Crater.
- Santiam. F. H. Brundage, forest supervisor, Albany (WU, P-WF); A. R. Wilcox, forest examiner.
- Siskiyou.—N. F. MACDUFF, forest supervisor, Grants Pass (WU, P-WF); D. B. Reynolds, deputy forest supervisor; H. Haefner, forest examiner.
- Siuslaw.-H. B. RANKIN, forest supervisor, Eugene (WU, P-WF); S. C. Beach, deputy forest supervisor; H. M. Johnson, forest examiner.

Umatilla.—W. W. CRYDER, forest supervisor, Heppner (WU, P-AM).

Umpqua.-S. C. BARTRUM, forest supervisor, Roseburg (WU, P-WF); George Bonebrake, deputy forest supervisor; A. F. Kerr, forest examiner; G. Y. Baker, forest assistant.

Wallowa.-H. W. HARRIS, forest supervisor, Wallowa (WU-Am); N. J. Billings, deputy forest supervisor; R. L. Hensel and E. H. Steffen, forest assistants.

Wenaha.—See Washington.

Whitman.—HENRY IRELAND, forest supervisor, Sumpter (WU via Baker-Am, WF via Baker); R. M. Evans, deputy forest supervisor; T. J. Starker, forest assistant.

WASHINGTON.

Chelan.-G. W. MILHAM, forest supervisor, Chelan (PT & T-Am, GN via Wenatchee).

Columbia.—A. E. Coнoon, forest supervisor, Portland, Oreg. (WU, P-Am, WF, N); W. W. G. Hastings, deputy forest supervisor; L. Wernsted, forest examiner; C. P. Willis, forest examiner.

Colville.—C. C. Reid, forest supervisor, Republic (WU, P-Am, GN); F. W. Cleator, deputy forest supervisor.

Okanogan.-H. M. HALE, forest supervisor, Okanogan (PT & T-Am, GN via Wenatchee); V. V. Harpham, deputy forest supervisor; A. W. Hodgman, forest assistant.

- Olympic.—R. L. Fromme, forest supervisor, Olympia (WU, P-Am, GN, N); A. A. Parker, deputy forest supervisor; E. J. Hanzlik, forest assistant.
- Rainier.—G. F. Allen, forest supervisor, Tacoma (WU, P-Am, N); P. T. Harris, deputy forest supervisor; E. J. Fenby, forest examiner.
- Snoqualmie.—Stanton G. Smith, forest supervisor, Seattle (WU, P-N, GN, WF); Lewis A. Treen, jr., deputy forest supervisor; Walter H. Leve and Alexander G. Jackson, forest examiners.
- Washington.—C. H. PARK, forest supervisor, Bellingham (WU, P-Am, GN, N).
- Wenaha.—J. M. SCHMITZ, forest supervisor, Walla Walla (WU-Am, N); Geo. Bright, forest assistant.
- Wenatchee.—A. H. Sylvester, forest supervisor, Leavenworth (WU-Am, GN).

DISTRICT 7.

Arkansas and Florida. Office, Atlantic Building, Washington, D. C. H. O. STABLER, acting district forester.

NATIONAL FORESTS.

ARKANSAS.

- Arkansas.—S. A. CHAPPELL, forest supervisor, Hot Springs (WU, P-WF, P); D. E. Fitten, deputy forest supervisor; C. J. Heller, forest examiner.
- Ozark.—Francis Kiefer, forest supervisor, Harrison (WU-WF); R. C. Huey, deputy forest supervisor; L. L. Janes and Robert S. Wallace, forest examiners.

FLORIDA.

Florida.-I. F. ELDREDGE, forest supervisor, Camp Pinchot, Garniers (WU, P); W. F. Hill, deputy forest supervisor.

BUREAU OF ENTOMOLOGY.

L. O. HOWARD, Chief.

Branch of Forest Insect Investigations—A. D. Hopkins, in charge.

FOREST INSECT FIELD STATIONS.

Northern Rocky Mountain Station, Missoula, Mont., for the States of Montana, Idaho, eastern Oregon, eastern Washington, Wyoming,

Nebraska, and South Dakota, north of the 42d parallel of latitude.

Josef Brunner, in charge.

Southern Rocky Mountain Station, Colorado Springs, Colo., for the States of New Mexico, Arizona, Colorado, Utah, and Nevada. W. D. Edmonston, in charge.

Pacific Slope Station, Placerville, Cal., for the States of California, western Oregon, and western Washington west of about the 120th

meridian. H. E. Burke, in charge.

Pacific Slope Substation, Ashland, Oreg., for the special investigation of insect enemies of forest-tree seeds. J. M. Miller, in charge.

Eastern Station, East Falls Church, Va., for the Eastern States. S. A. Rohwer, in charge.

SERVICE CHANGES.

APPOINTED.

Acquisition.—Beverly M. Higginbotham, examiner of surveys; Roy T. Reed, Dallas E. Edmonston, William H. Stoneburner, Arthur A. Wood, and James H. Young, assistant forest rangers.

LANDS .- Water power: Ralph R. Randell, junior engineer.

DISTRICT 1.—Operation: Assistant forest rangers—James P. Brown, Deerlodge; Albert H. Nee, Gallatin; clerks (stenographers and typewriters)—Margaret Blaine, Helena; Ellen P. Wing, Coeur d'Alene.

DISTRICT 2.—Lyle A. Whitsit, hydroelectrical engineer, district office.

DISTRICT 3.—Operation: William K. Blessing, clerk, Coronado.

DISTRICT 4.—Operation: Lavina A. Ririe, clerk (stenographer and typewriter), district office; Luella Christensen, clerk (typewriter), Manti.

DISTRICT 5.—Katherine M. Mathes and Anna E. Nolte, clerks (stenographers and typewriters), district office.

DISTRICT 6.—Operation: J. L. Peterson, assistant forest ranger, Wallowa.

PROMOTED IN RANK.

OPERATION .- Geography: Charles A. Kolb, draftsman to chief of

geography.

DISTRICT 1.—Operation: E. A. Holcomb, deputy forest supervisor to forest supervisor, St. Joe; Meyer H. Wolff, deputy forest supervisor to forest supervisor, Coeur d'Alene; Donald Bruce, forest examiner, district office, to forest supervisor, Flathead. Lands: D. M. Conner, assistant forest ranger to national forest examiner, district office. Geography: George H. Lautz, topographic draftsman to surveyor draftsman; Charles F. Farmer, topographic draftsman to civil engineer, district office.

DISTRICT 2.—Operation: Alva A. Simpson, deputy forest supervisor to forest supervisor, Arapaho; James G. Cayton, assistant forest ranger to forest ranger, Battlement.

DISTRICT 3.—Operation: Charles H. Kissam, forest ranger to deputy forest supervisor, Sitgreaves; assistant forest rangers to forest rangers—Franklin R. Taylor, Crook; Lee R. York, Lincoln; Llewellyn J. Putsch, Manzano; David L. MacBeath, Coronado; Ralph E. King, Prescott.

DISTRICT 4.—Operation: John A. Ferguson, assistant forest ranger to forest ranger, Caribou.

DISTRICT 5.—Assistant forest rangers to forest rangers—Oliver H. McElfresh, Angeles; Martin E. White, Shasta; Hosea L. Clark, Sierra; Aaron H. Walton, Tahoe; William A. Merrill, forest ranger to deputy forest supervisor, Tahoe; M. A. Benedict, deputy forest supervisor, Sierra, to forest supervisor, California.

DISTRICT 6.—Operation: Roland L. Cline, assistant forest ranger to forest ranger, Columbia; R. E. Kan Smith, forest ranger to forest examiner, Whitman.

DISTRICT 7.—Herbert O. Stabler, forest supervisor to assistant district forester.

CHANGE IN DESIGNATION.

ACQUISITION.—Forest examiners to national forest examiners—Elmer D. Fletcher, Verne Rhoades, Edward V. Clark, and Jacob L. Pritchard.

LANDS.—Land classification: Herbert E. Woolley, forest examiner to national forest examiner.

SILVICULTURE.—Forest investigations: Charles H. Shinn, forest examiner to national forest examiner.

Products.—Laboratory: Chemical engineers in forest products to engineers in forest products—H. E. Surface and Sidney D. Wells, Rolf Thelen, chief, section of timber tests to engineer in forest products; assistant engineers in forest products to engineers in forest products—Clyde H. Teesdale and George C. McNaughton; A. K. Armstrong, engineer in timber tests to assistant engineer in forest products; Charles S. Gwinn, assistant chemical engineer in forest products to assistant engineer in forest products; assistant chemists in forest products to chemists in forest products—Robert C. Palmer and Fred W. Kressman; James Orr Bixby, assistant engineer to mechanical draftsman; Gertrude J. Griffin, computing clerk to assistant xylotomist.

DISTRICT 1.—Operation: Forest examiners to deputy forest supervisors—J. K. Dwinelle, James C. Whithan, W. W. Morris, and W. B. Willey; W. C. Latane, deputy forest supervisor to forest assistant; A. J. Feary, assistant forest ranger to forest ranger; forest examiners to national forest examiners—Charles L. Smith, John D. Jones, R. J. Moore, and Ciarence B. Swim; Joseph B. Halm, deputy forest supervisor to topographic draftsman; Leslie F. Vinal, forest ranger to

scaler; assistant forest rangers to scalers—Louis H. Foote, George A. Hamilton, Eugene J. Jacroux, and Calvin A. Dahlgren.

DISTRICT 2 .- Operation: Roy Smith, forest examiner to national

forest examiner, district office.

DISTRICT 3.—Lands: Frederic Winn, forest examiner to national forest examiner; Morton M. Cheney, forest examiner to national forest examiner, district office. Operation: Howard B. Waha, deputy forest supervisor to national forest examiner, district office; Thomas R. Stewart, forest surveyor to forest ranger, Pecos.

DISTRICT 5.—Forest examiners to national forest examiners, district office—Ralph Hopping, S. N. Stoner, George Miller, P. L. Day, and Frederick H. Hafley; Edward S. Mainwaring, forest ranger to assistant

forest ranger, Sierra.

DISTRICT 6.—Lands: J. Roy Harvey, forest examiner to national forest examiner, district office. Operation: B. Frank Heintzleman, forest examiner to deputy forest supervisor, Cascade; Ephraim Barnes, deputy forest supervisor to forest supervisor, Minam.

RESIGNED.

SILVICULTURE.—Forest Investigations: Forest assistants, Alfred Akerman and Royal S. Kellogg. State cooperation: Fred R. Fairchild,

expert.

DISTRICT 1.—Operation: Forest supervisors—C. W. Hudson, Madison; and Page S. Bunker, Flathead; S. R. Hays, deputy forest supervisor, Gallatin; Herman H. Chapman, forest assistant, Flathead; E. A. Findell, forest ranger, Missoula; assistant forest rangers—Harry Holvorson, Nez Perce; Stephen A. Wallace, Deerlodge; Hamilton Richardson, Helena; S. J. Emswiler, Sioux; G. H. Hankinson, Lolo; Eunice E. Shearer, clerk (stenographer and typewriter), Clearwater. District office: Milton H. Slifer, topographic draftsman.

DISTRICT 2.—Operation: Rosemary Rhode, clerk, district office; G. P. Bard, forest supervisor, Arapaho; Bruno R. Kudlich, forest assistant, Arapaho; Philip A. Guibord, forest assistant, Superior; Ira T. Starbuck, forest ranger, Holy Cross; Fred S. Cuenin, assistant forest ranger, Cochetopa; Louis D. Miller, assistant forest ranger, San Isabel; Alfred C. Anderson, forest clerk, San Isabel; James F. Hubbell, forest clerk,

Montezuma.

DISTRICT 3.—Operation: Assistant forest rangers—John H. Hinck, jr., Apache; John B. Wight, Crook; Daniel R. Carter and Arthur W. Sypher, Jemez; George R. Yorke, Tusayan; forest rangers—Waldemar E. Currlin, Coronado; George H. Birdno, Crook; William B. Bunton, Lawrence G. Haynes, and Robert F. Rhinehart, Datil; Ophelia M. Celaya, clerk (stenographer and typewriter), Coconino.

DISTRICT 4.—Operation: Edwin H. Clarke, forest supervisor, Wasatch; Edward C. Bagley, forest ranger, Fishlake; assistant forest

rangers—Lee Roy Tracht, Challis; Cyrus R. Hunter, Payette; Ralph W. Thompson, clerk, Targhee; Antoinette Landgraf, clerk (stenographer and typewriter), district office.

DISTRICT 5.—Clerks (stenographers and typewriters), district office—Harry Factor, Alma M. Flood, and Rosalie E. Westerfeld; Joseph C. La Plant, forest ranger, Angeles; Earle P. Sutton, assistant forest ranger, Eldorado; Ray H. Avery, clerk (stenographer and typewriter), Kern; Harry H. Chivington, forest ranger, Shasta; George W. Cavin, forest ranger, Sierra; Bruce P. Viles, assistant forest ranger, Trinity.

DISTRICT 6.—Law: Pearl Shrader, clerk (stenographer and type-writer), district office. District office: Philip H. Dater, hydroelectrical engineer. Products: Carroll W. Dunning, statistician, district office; O. P. M. Goss, engineer, Seattle laboratory. Operation: Wm. Raihtel, assistant forest ranger, Olympic; Jos. A. Harris, forest ranger, Wallowa.

DISTRICT 7.—R. E. Hopson, forest assistant, Arkansas; James D. Ruble, assistant forest ranger, Ozark.

DISMISSED.

Assistant forest rangers—Frank McClung and Armon E. Havens. Flathead, and William P. Lawson.

With deep regret, announcement is made of the death of Wm. M. Butler, clerk, Washington office, January 25, and of Supervisor William McCoy of the Minidoka National Forest, April 5.

SERVICE NOTES FOR APRIL.

These notes contain instructions and necessary information to forest officers, and will therefore be carefully read and kept on file for reference.

LAW.

OFFICE OF THE SOLICITOR.

Law Case in District 1-

T. D. Farrow, innocent timber trespass, Flathead National Forest, damage \$42.50, settled March 10, 1914.

Law Cases in District 3-

On January 18 Jesus and Francisco Anacoma were arrested for stealing Government property from the Metcalf Ranger Station, Apache National Forest. At the hearing before the United States commissioner on January 23 the case was dismissed because of the youthfulness of the defendants, and they were turned over to the State authorities, who had them committed to the State reform school until they are 21 years of age.

On January 2 the grazing trespass case against A. G. Seis, Manzano National Forest, was settled by payment of \$226, the full amount demanded.

On February 16 the timber trespass against the Tularosa Copper Co., Alamo National Forest, was settled by payment of \$68.75, the full amount demanded.

The grazing trespass case against J. A. Gallegos, Carson National Forest, was compromised, and the sum of \$50 was accepted in settlement.

On March 2, 1914, Thomas R. King pleaded guilty to an indictment charging him with the unlawful grazing of sheep on the Prescott National Forest. He was sentenced to pay a fine of \$25.

Law Cases in District 4-

An indictment was returned by the Federal grand jury at Boise. Idaho, on February 6, charging Jacob Bear, a sheep herder, with starting a fire in the Boise National Forest and leaving it without having extinguished it. The case was set for trial on or about March 27.

In the case of United States v. Utah Power & Light Co. a motion for rehearing before the United States Circuit Court of Appeals was denied, which will result in the case being returned to the district court for further proceedings in accordance with the decision.

The Attorney General has filed a petition of intervention in a case brought by the Boise Lumber Co. against the Oregon Short Line and the Pacific & Idaho Northern Railroad Co., asking the Interstate Commerce Commission to reduce freight rates on logs from points in the Payette and Weiser National Forests into Boise, Idaho. A petition of intervention has also been filed by the State of Idaho on behalf of the public utilities commission of that State and also on behalf of the State board of land commissioners, the State being the owner of a considerable body of standing timber which would be affected by the rates. The hearing is set for about June 15, 1914, at Boise, Idaho.

Law Cases in District 5-

A timber trespass of the Verdi Lumber Co., on the Tahoe National Forest, was settled by the payment of \$318.60.

A timber trespass of the Swayne Lumber Co., on the Plumas National Forest, was settled by payment of \$303.88.

Payment in full in the sum of \$111.48 was made in settlement of a timber trespass of J. J. Potter on the Modoc National Forest.

R. M. Diggs settled two grazing trespass cases by the payment of the respective sums of \$68.75 damages and \$9.50 costs and \$47.12 damages and \$23.35 costs. A decree of perpetual injunction was also entered in both cases by consent of the defendant.

Do Ohtart and L. Lopeteguy settled their grazing trespass, on the Kern National Forest, by the payment of actual damages in the sum of \$12.34. These parties previously plead guilty to a criminal charge in the same trespass and were fined.

Settlement for grazing trespass on the Mono National Forest, in amount \$86.40, was made by F. W. Simpson.

Settlement for grazing trespass on the Mono National Forest, in amount \$82.80, was made by C. E. Wedertz.

Law Case in District 6-

On February 4, 1914, the Circuit Court of Appeals for the Ninth District reversed the decision of Judge Wolverton in the case of the United States v. E. J. Cowlishaw et al., and held that in this case the State of Oregon took title to the school section involved, which was embraced in national forest withdrawal subsequent to the survey in the field and approval thereof by the surveyor general for Oregon, but prior to the acceptance of the survey by the Commissioner of the General Land Office, Judge Gilbert dissenting. The decision was not based upon the nature of the grant, but it held that a sufficient survey had been made at the time of the withdrawal to except it therefrom and vest title in the State. Appeal is now being prepared to the Supreme Court of the United States.

OPERATION.

Perpetuation of Dilapidated Land Office Corners-

Reference is made to an erroneous statement concerning the restoration of lost or obliterated corners appearing on page 93 of the Field Program of January, 1913.

Restoration by Authorized Officials Only.—No Land Office corner can be legally restored (in a manner which will be recognized by the General Land Office) by any person who is not formally instructed to do the work by the United States surveyor general for that State.

Tampering with Corners a Penal Offense.—To aid in the protection of all evidence of public-land surveys, a clause was enacted in chapter 398, 29 United States Statutes, page 343, prohibiting the destruction or removal of monuments of any United States survey, and fixing penalties for violation.

This clause was amended by section 57 of the act approved March 4, 1909, revising and amending the penal laws of the United States, to read as follows:

SEC. 57. Whoever shall willfully destroy, deface, change, or remove to another place any section corner, quarter-section corner, or meander post, on any Government line of survey, or shall willfully deface, change, or remove any monument or bench mark of any Government survey, shall be fined not more than two hundred and fifty dollars, or imprisoned not more than six months, or both.

Actions to be Avoided by Forest Officers.—Forest officers are instructed not to attempt to "restore" Land Office corners, or to remark their locations by using a combination of materials and markings which may be mistaken for the work of the Land Office, except when they work under formal instructions from a surveyor general.

They should not build up dilapidated corners with stones bearing notches or grooves, or the numerals 1/4, or dig pits, or scribe blazed trees of posts at or near the location of a Land Office corner. The practice of setting stones marked with notches, grooves, or 1/4, and the additional letters F S is specifically prohibited.

In retracing Land Office lines care should be taken not to disturb the condition in which corners are found, since such action may destroy all evidence by which the corner can be absolutely identified. Let the marked stone or stake lie just where it is found. Do not use the stones at the corner to build a new mound, as the marked stone described in the official record may unwittingly be removed from its proper location or other evidence of the true point for corner destroyed. If needed to pile around a stake or marked stone, bring stones from another locality.

How to Perpetuate Dilapidated Corners.—It is highly desirable, however, that the exact location of Land Office corners found in a dilapidated condition should be perpetuated. For this purpose the metal Forest Service cruising poster should be employed. It should be nailed to a post, either driven in the ground or set in a pile of stones. The location should be as near to the true point for corner as may be

determined. The poster may also be nailed on witness trees, but unless the tree itself is the point for corner the poster should have the word "Witness" scratched upon it in addition to the proper marking to show the location of the corner in the survey system.

Stone Monuments May be Used on Forest Boundaries Only.—It is not intended to prevent entirely the use of stone, which is the most durable and convenient material for marking forest boundaries.

At any mile or half mile on a boundary a single large stone monument may be erected, care being taken not to damage or cover up existing Land Office corners. At mile points the section numbers should be cut, in Arabic figures only, on the four sides of the main stone, facing the corresponding sections. At half-mile points the Arabic numbers of the two opposite sections should be cut on the sides of the stone facing them, and in addition the words "Half Mile." On both kinds of monuments the letters F S should always be cut on top. The marked stone should be in the mound, and not set with a separate mound of stone or earth, as is the Land Office practice.

No witness trees should be scribed, the cruising poster being nailed on the blazes instead, when it is desired to construct and record witnesses for the boundary monuments in unsurveyed lands or draw attention to bearing trees of the Land Office on which the scribing is illegible or grown over or erased. Care must be taken in blazing not to destroy Land Office scribing which may have become grown over with bark.

Previous Instructions for Surveys not Modified.—Nothing in this statement should be understood as modifying any previous instructions for Settlement or Entry Surveys.

LANDS.

Settlement-

March 14, 1914, the Assistant Secretary of the Interior, in the case of Robert G. McDougall, on appeal, final proof submitted on a June 11 entry in the Jemez National Forest, held that credit may be accorded for residence for the full period after the date of the special-use permit and revoked former decisions and instructions to the contrary. The decision says:

Technically this land was not public land, and was not subject to general settlement claim at the time this entryman made settlement thereon, but he was not a trespasser, as he had filed his application for listing with the Forest Service for opening under the said act of June 11. 1906, and had been given a special-use permit by that service. He was, therefore, in legal occupation of the land after the date of the permit, with the understanding that if the tract be found appropriate for opening under said act, he would have a preference right of entry, as provided by that act. He thus had a restricted or qualified settlement claim. If it had resulted that his application for listing could not be allowed, then, of course, his settlement could not have ripened into a claim for title. But the land was opened upon his application, he was accorded preference right of entry, and he made entry, all in pur-

suance of the claim initiated by his application. No good reason is seen why credit for residence for the full period after the date of the permit may not be accorded under such circumstances.

ACCOUNTS.

Bill of Lading-Appropriation to be Indicated-

In the field program for April, 1912, and subsequently by circular letter of the Forester, all forest officers making shipment on bills of lading were requested to see that the appropriation chargeable was properly indicated on the original bill of lading, Form L, delivered to the transportation company, as well as on the Form M sent to the district fiscal agent.

These instructions have been overlooked in many cases, and forest officers are again requested to give the matter attention, as it is of importance in the settlement of transportation accounts in the Washington office.

SERVICE PUBLICATIONS ISSUED.

Department Bulletin 11.—Forest Management of Loblolly Pine in Delaware, Maryland, and Virginia.

Department Bulletin 13.—White Pine under Forest Management.

Department Bulletin 55.—Balsam Fir.

Department Bulletin 67.—Tests of Rocky Mountain Woods for Telephone Poles.

Department Bulletin 86.—Tests of Wooden Barrels.

Unnumbered Pub.—Forest Fire Protection by the States.

Unnumbered · Pub.—Forest Tree Diseases Common in California and Nevada.

Unnumbered Pub.—Information Regarding Employment on the National Forests. (Sixth revision.)

Folder for Routt National Forest.

CUMULATIVE INDEX TO SERVICE NOTES AND ORDERS.

(JULY, 1913-APRIL, 1914.)

[Numbers in parentheses after the month indicate page.]

Annual property return; January (90).

Appointed chief clerk of the Department of the Interior; July (28).

Bill of lading—Appropriation to be indicated; April (121).

Classification of grazing permittees; January (92).

Color tints and crayons; July (27).

Conference at Salt Lake City; October (59).

Cooperation in securing commercial and botanical range data; July (28).

Crayons and color tints; July (27).

Excepted strips; January (92).

```
Fire trespass. (See Trespass, fire.)
Form 411.—Report of Description of Horses, Mules, and Burros;
  January (91).
                 (See Trespass, grazing.)
Grazing trespass.
Law cases in district 1; July (24); January (87); April (117).
                     2; July (25); October (59); January (87-88).
                     3; July (26); January (88); April (117-118).
                     4; July (27); January (88-89); April (118).
                     5; October (61); January (90); April (118-119).
                     6; July (27); January (90); April (119).
                     (See Trespass, occupancy.)
Occupancy trespass.
Parcel post; January (91).
Perpetuation of dilapidated Land Office corners; April (119).
Record of Land Office corners; January (91).
Right of way—Former procedure restored; October (62).
Settlement; April (121).
Telephone lines; January (92).
Timber trespass. (See Trespass, timber.)
Trespass cases, fire, district 1; July (24).
                          2; July (25); October (60-61); January (88).
                          3; July (26).
                          4; April (118).
                          5; October (61-62); January (90).
                          6; July (27); January (90).
               grazing, district 1; July (25); January (87).
                              2; July (25); October (61); January
                                    (88).
                              3; July(26); January(88); April(118).
                              4; July (27); January (89-90).
                              5; January (90); April (118-119).
                              6; January (90).
               occupancy, district 1; January (87).
                                 2; January (87-88).
                                 3; July (26).
                                 4; July (27); January (88-89);
                                      April (118).
                                 5: January (90).
               timber, district 1; July (24); April (117).
                             2; October (61); January (88).
                             3; July (26); January (88); April (118).
                             4; January (89).
                             5; October (61); January (90); April
                                   (118).
                              6; January (90).
```

